STIC Search Report
Biotech-Chem Library

STIC Database Tracking Number: 142006

TO: Terra Gibbs **Location: 2d10 / 2c18** **Tuesday, January 25, 2005** **Art Unit: 1635** **Phone: 272-0758** **Serial Number: 10 / 005337**	**From: Jan Delaval** **Location: Biotech-Chem Library** **Rem 1a51** **Phone: 272-2504** **jan.delaval@uspto.gov**

Search Notes

Access DB# 142006

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: _____ Examiner # :_____ Date: _____
Art Unit: _____ Phone Number 30_____ Serial Number: _____
Mail Box and Bldg/Room Location: _____ Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of invention: _____

Inventors (please provide full names): _____

_____

Earliest Priority Filing Date: _____

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

****

STAFF USE ONLY	Type of Search	Vendors and cost where applicable
Searcher: Jan	NA Sequence (#) ✓	STN _____
Searcher Phone #: 27504	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) _____	Questel/Orbit _____
Date Searcher Picked Up: 1/25/06	Bibliographic _____	Dr.Link _____
Date Completed: 1/25/06	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: _____	Fulltext _____	Sequence Systems ✓
Clerical Prep Time: 10	Patent Family _____	WWW/Internet _____
Online Time: 1 + 45	Other _____	Other (specify) _____

PTO-1590 (8-01)

1/4/2006

Delaval, Jan

From: Gibbs, Terra
Sent: Tuesday, January 25, 2005 2:16 PM
To: Delaval, Jan
Subject: RE: 10/005337

The Accession number is AF041847.

-----Original Message-----
From: Delaval, Jan
Sent: Tuesday, January 25, 2005 8:08 AM
To: Gibbs, Terra
Subject: 10/005337

Terra -

I am processing your search request for 10 / 005337.

You have requested a comparison between seq id no 2 and af04184.

I have not been able to locate this accession number in any of our in-house databases; I could not locate this number at NCBI.

Please verify the accession number.

Thanks.

Jan Delaval, 22504

STIC-Biotech/ChemLib 1/42006

From: Gibbs, Terra
Sent: Tuesday, January 18, 2005 4:42 PM
To: STIC-Biotech/ChemLib
Subject: RE: Sequence comparison

I submitted this request, but put the wrong Accession Number,

I requested a search for SEQ ID NO: 2 of USSN 10/005,337. Accession number **AF04184** came up as a good piece of art.
However, I need Accession Number **AF04184** to be at least 80% identical to SEQ ID NO:2 of USSN 10/005,337 or as close as possible.
Can I please have a comparison between these two sequences, with the similarity being at least 80%?
Thank You.

-----Original Message-----
From: Gibbs, Terra
Sent: Friday, January 07, 2005 4:24 PM
To: STIC-Biotech/ChemLib
Subject: Sequence comparison

I requested a search for SEQ ID NO: 2 of USSN 10/005,337. Accession number AF131884 came up as a good piece of art.
However, I need Accession Number AF131884 to be at least 80% identical to SEQ ID NO:2 of USSN 10/005,337.
Can I please have a comparison between these two sequences, with the similarity being at least 80%?
Thank You.

Terra Cotta Gibbs, Ph.D.
Art Unit 1635
Remsen Building 2D10
Mailbox 2C18
571-272-0758

****
STAFF USE ONLY

Searcher:_____
Searcher Phone: 2-
Date Searcher Picked up:____
Date Completed:_____
Searcher Prep/Rev. Time:___
Online Time:_____

****
Type of Search
NA Sequence: #_____
AA Sequence :#_____
Structure: #_____
Bibliographic:_____
Litigation:_____
Patent Family:_____
Other:_____

****
Vendors and cost where applicable
STN:_____
DIALOG:_____
QUESTEL/ORBIT:_____
LEXIS/NEXIS:_____
SEQUENCE SYSTEM:_____
WWW/Internet:_____
Other(Specify):_____

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STIC-Biotech/ChemLib 148004

From: Gibbs, Terra
Sent: Friday, January 07, 2005 4:24 PM
To: STIC-Biotech/ChemLib
Subject: Sequence comparison

I requested a search for SEQ ID NO: 2 of USSN 10/005,337. Accession number AF131884 came up as a good piece of art.
However, I need Accession Number AF131884 to be at least 80% identical to SEQ ID NO:2 of USSN 10/005,337.
Can I please have a comparison between these two sequences, with the similarity being at least 80%?
Thank You.

Terra Cotta Gibbs, Ph.D.
Art Unit 1635
Remsen Building 2D10
Mailbox 2C18
571-272-0758

****
STAFF USE ONLY

Searcher:_____
Searcher Phone: 2-
Date Searcher Picked up:____
Date Completed:_____
Searcher Prep/Rev. Time:___
Online Time:_____

****
Type of Search
NA Sequence: #_____
AA Sequence :#_____
Structure: #_____
Bibliographic:_____
Litigation:_____
Patent Family:_____
Other:_____

****
Vendors and cost where applicable
STN:_____
DIALOG:_____
QUESTEL/ORBIT:_____
LEXIS/NEXIS:_____
SEQUENCE SYSTEM:_____
WWW/Internet:_____
Other(Specify):_____

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O| |O  IntelliGenetics
> O <

FastDB - Fast Pairwise Comparison of Sequences
Release 5.4

Results file seq2-af041847.res made by jdelaval on Tue 25 Jan 105 14:35:43-PST.

Query sequence being compared:US-10-005-337A-2 (1-2074)
Number of sequences searched:                  1
Number of scores above cutoff:                 1

      Results of the initial comparison of US-10-005-337A-2 (1-2074) with:
        File : af041847.seq

   100-
     -
N    -
U  50-
M    -
B    -
E    -
R    -
     -
O    -
F  10-
     -
S    -
E   5-
Q    -
U    -
E    -
N    -
C    -
E    -                                                              *
S   0-----------------------------------------------------------------
     |      |      |      |      |      |      |      |      |      |
SCORE 0      7     14     21     28     34     41     48     55     62
STDEV
```

PARAMETERS

Similarity matrix	Unitary	K-tuple	4
Mismatch penalty	1	Joining penalty	30
Gap penalty	1.00	Window size	32
Gap size penalty	0.33		
Cutoff score	0		
Randomization group	0		

SEARCH STATISTICS

Scores:	Mean	Median	Standard Deviation
	62	0	0.00

Times:	CPU	Total Elapsed
	00:00:00.00	00:00:00.00

Number of residues:	1026
Number of sequences searched:	1
Number of scores above cutoff:	1

The scores below are sorted by initial score.
Significance is calculated based on initial score.

A 100% identical sequence to the query sequence was not found.

The list of best scores is:

Sequence Name	Description	Length	Init. Score	Opt. Score	Sig.	Frame
1. af041847	TOIG of: af041847 check: 453	1026	62	434	0.00	0

1. US-10-005-337A-2 (1-2074)
af041847 TOIG of: af041847 check: 4536 from: 1 to: 1026

TOIG of: af041847 check: 4536 from: 1 to: 1026

```
LOCUS       AF041847               1026 bp    mRNA    linear   ROD 21-FEB-1998
DEFINITION  Mus musculus cardiac ankyrin repeat protein MCARP mRNA, complete
            cds.
ACCESSION   AF041847
VERSION     AF041847.1  GI:2905615
KEYWORDS    .
SOURCE      Mus musculus (house mouse)
  ORGANISM  Mus musculus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE   1  (bases 1 to 1026)
  AUTHORS   Zou,Y., Evans,S., Chen,J., Kuo,H.C., Harvey,R.P. and Chien,K.R.
  TITLE     CARP, a cardiac ankyrin repeat protein, is downstream in the Nkx2-5
            homeobox gene pathway
  JOURNAL   Development 124 (4), 793-804 (1997)
  MEDLINE   97195688
   PUBMED   9043061
REFERENCE   2  (bases 1 to 1026)
  AUTHORS   Chen,J. and Chien,K.R.
  TITLE     Direct Submission
  JOURNAL   Submitted (07-JAN-1998) Medicine, UCSD, 9500 Gilman Dr, La Jolla,
            CA 92093, USA
FEATURES             Location/Qualifiers
     source          1. .1026
                     /organism="Mus musculus"
                     /mol_type="mRNA"
                     /db_xref="taxon:10090"
                     /tissue_type="heart"
     CDS             15. .974
                     /codon_start=1
                     /product="cardiac ankyrin repeat protein MCARP"
                     /protein_id="AAC03533.1"
                     /db_xref="GI:2905616"
                     /translation="MMVLRVEELVTGKKNSNGAAGEFLPGEFRNGEYEAAVALEKQED
                     LKTLPANSVKQGEEQRKSEKLREAELKKKKLEQRSKLENLEDLEIIVQLKKRKKYKKT
                     KVPVVKEPEPEIMTEPVDVPRFLKAALENKLPVVEKLVSDKNSPDVCDEYKRTALHRA
                     CLEGHLAIVEKLMEAGAQIEFRDMLESTAIHWACRGGNADVLKLLLNKGAKISARDKL
                     LSTALHVAVRTGHYECAEHLIACEADLNAKDREGDTPLHDAVRLNRYKMIRLLMTFGA
                     DLKVKNCAGKTPMDLVLHWQSGTKAIFDSPKENAYKNSRIATF"
ORIGIN

AF041847  Length: 1026  January 25, 2005 14:32  Type: N  Check: 4536  ..

Initial Score    =     62  Optimized Score  =    434  Significance =  0.00
Residue Identity =    48%  Matches          =    549  Mismatches   =   407
Gaps             =    168  Conservative Substitutions               =     0

          10        20        30        40        50        60        70
   CTGCAGCAAGTTACTTAATGTTTTTTGCCTCAGCATCCTCTCTGTAAAATGAGAGCATTAGTCTTGCTCCAA

         80        90       100       110       120       130       140
   CTTCGAGGGCATGGACAGCTCTGGGATTTCATATCCAAGACCCTTAAACATCCCACAGTCCTTCCCCCAAAC

        150       160       170       180       190       200       210
   ACTTCTCCTCCTAATACCTCCCTCAGTTTGGGTCAGGCCTGGAACAAAAAGGCATACGAAATGGTAGAAAAA

        220       230       240       250       260       270       280
   GTGTCCATGACTACTTCTGACTTAGATGAAGAGACCAATGAAAATAGTAATGACTCTGTTTGCTTCAGCAGG

       290       300       310       320       330       340       350       360
   ACATATACTAAAATAGGAGCTATACAAAGAAGATTAGCATGGACTCTGTGCAAGAATGACACACAAATTTGT
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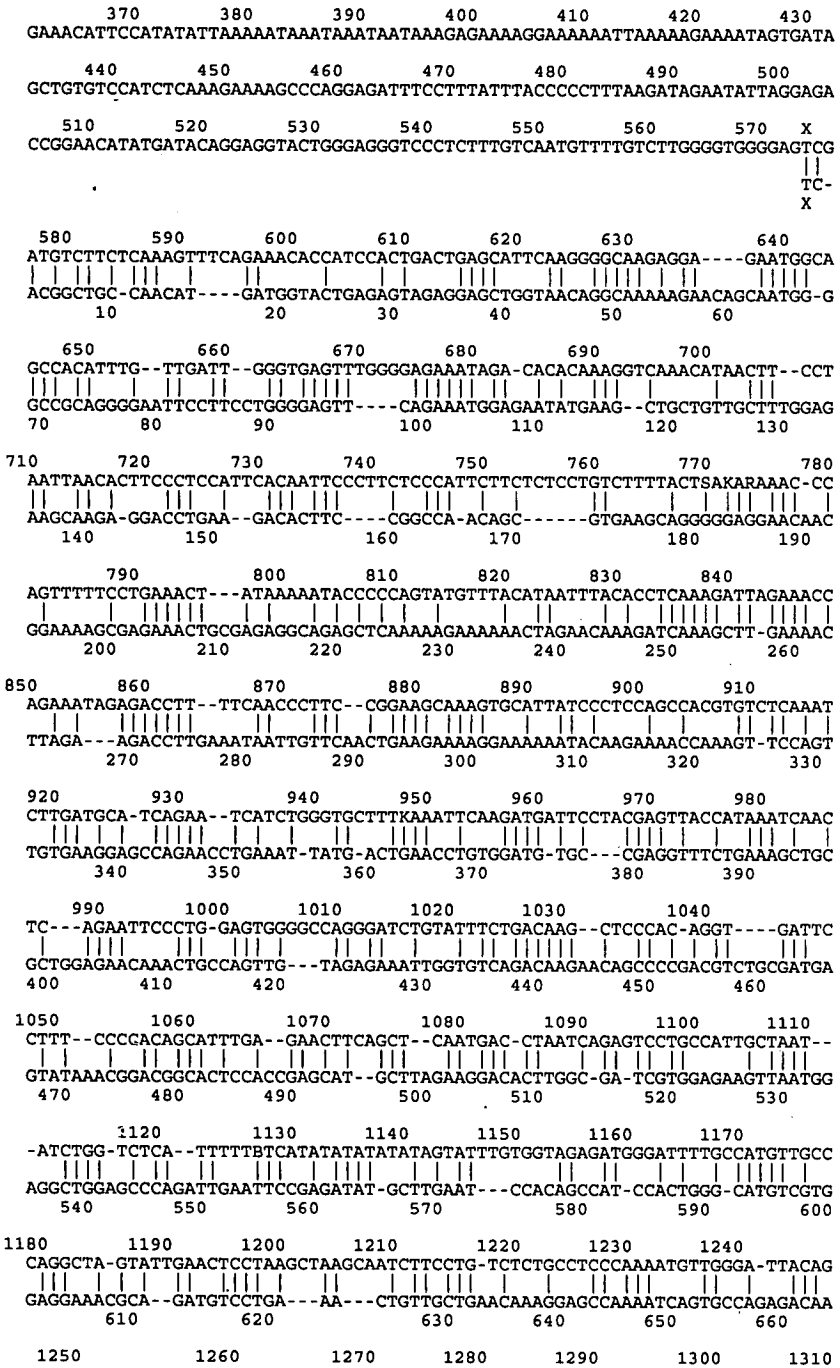

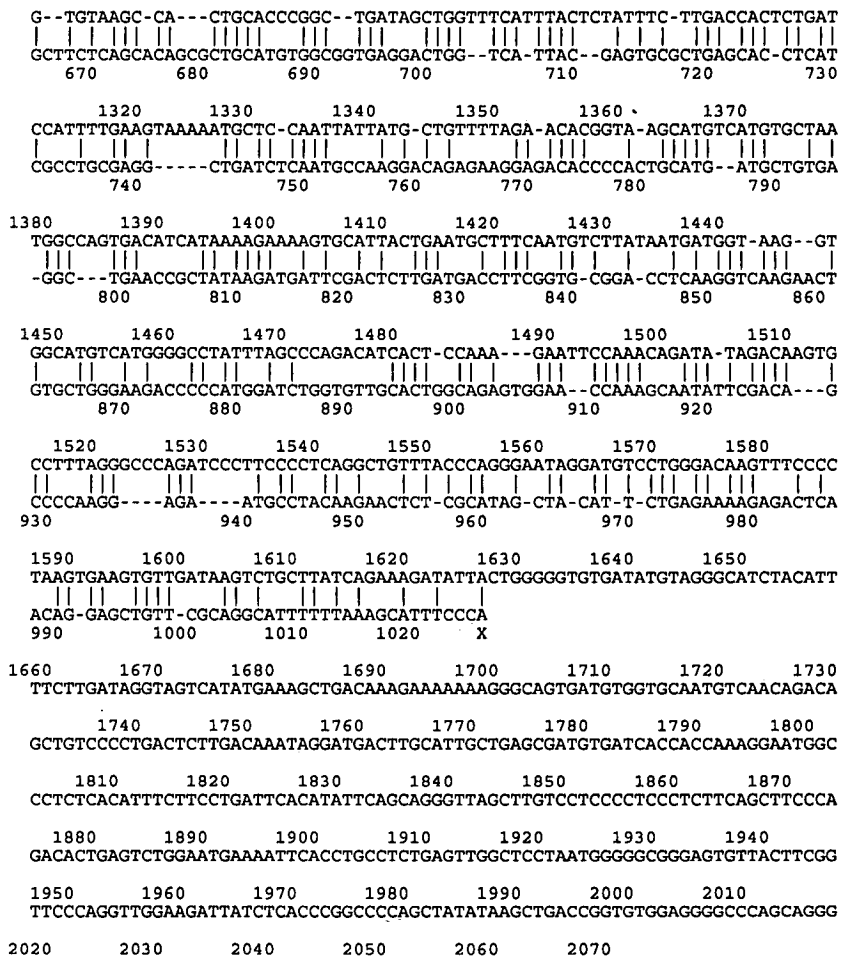

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O| |O  IntelliGenetics
> O <

FastDB - Fast Pairwise Comparison of Sequences
Release 5.4

Results file us-10-005-337a-2-inv.res made by jdelaval on Tue 25 Jan 105 14:36:34-PST.


Query sequence being compared:US-10-005-337A-2' (1-2074)
Number of sequences searched:                  1
Number of scores above cutoff:                 1

      Results of the initial comparison of US-10-005-337A-2' (1-2074) with:
        File : af041847.seq

   100-
      -
N     -
U   50-
M     -
B     -
E     -
R     -
      -
O     -
F   10-
      -
S     -
E    5-
Q     -
U     -
E     -
N     -
C     -
E     -                                                              *
S    0-----------------------------------------------------------------
       |     |     |     |     |     |     |     |     |     |     |
SCORE 0     3     6     9     12    16    19    22    25    28
STDEV


                              PARAMETERS

Similarity matrix      Unitary     K-tuple                    4
Mismatch penalty             1     Joining penalty           30
Gap penalty               1.00     Window size               32
Gap size penalty          0.33
Cutoff score                 0
Randomization group          0

                           SEARCH STATISTICS

Scores:                    Mean       Median     Standard Deviation
                             28            0          0.00

Times:                      CPU                   Total Elapsed
                      00:00:00.00                 00:00:00.00

Number of residues:                    1026
Number of sequences searched:             1
Number of scores above cutoff:            1


The scores below are sorted by initial score.
Significance is calculated based on initial score.

A 100% identical sequence to the query sequence was not found.


The list of best scores is:
```

Sequence Name	Description	Length	Init. Score	Opt. Score	Sig.	Frame
1. af041847	TOIG of: af041847 check: 453	1026	28	423	0.00	0

```
1. US-10-005-337A-2' (1-2074)
   af041847     TOIG of: af041847  check: 4536  from: 1  to: 1026

  TOIG of: af041847  check: 4536  from: 1  to: 1026

 LOCUS       AF041847               1026 bp    mRNA    linear   ROD 21-FEB-1998
 DEFINITION  Mus musculus cardiac ankyrin repeat protein MCARP mRNA, complete
             cds.
 ACCESSION   AF041847
 VERSION     AF041847.1  GI:2905615
 KEYWORDS    .
 SOURCE      Mus musculus (house mouse)
   ORGANISM  Mus musculus
             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
             Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 REFERENCE   1  (bases 1 to 1026)
   AUTHORS   Zou,Y., Evans,S., Chen,J., Kuo,H.C., Harvey,R.P. and Chien,K.R.
   TITLE     CARP, a cardiac ankyrin repeat protein, is downstream in the Nkx2-5
             homeobox gene pathway
   JOURNAL   Development 124 (4), 793-804 (1997)
   MEDLINE   97195688
    PUBMED   9043061
 REFERENCE   2  (bases 1 to 1026)
   AUTHORS   Chen,J. and Chien,K.R.
   TITLE     Direct Submission
   JOURNAL   Submitted (07-JAN-1998) Medicine, UCSD, 9500 Gilman Dr, La Jolla,
             CA 92093, USA
 FEATURES             Location/Qualifiers
      source          1. .1026
                      /organism="Mus musculus"
                      /mol_type="mRNA"
                      /db_xref="taxon:10090"
                      /tissue_type="heart"
      CDS             15. .974
                      /codon_start=1
                      /product="cardiac ankyrin repeat protein MCARP"
                      /protein_id="AAC03533.1"
                      /db_xref="GI:2905616"
                      /translation="MMVLRVEELVTGKKNSNGAAGEFLPGEFRNGEYEAAVALEKQED
                      LKTLPANSVKQGEEQRKSEKLREAELKKKKLEQRSKLENLEDLEIIVQLKKRKKYKKT
                      KVPVVKEPEPEIMTEPVDVPRFLKAALENKLPVVEKLVSDKNSPDVCDEYKRTALHRA
                      CLEGHLAIVEKLMEAGAQIEFRDMLESTAIHWACRGGNADVLKLLLNKGAKISARDKL
                      LSTALHVAVRTGHYECAEHLIACEADLNAKDREGDTPLHDAVRLNRYKMIRLLMTFGA
                      DLKVKNCAGKTPMDLVLHWQSGTKAIFDSPKENAYKNSRIATF"
 ORIGIN

 AF041847  Length: 1026  January 25, 2005 14:32  Type: N  Check: 4536  ..

Initial Score     =     28  Optimized Score  =    423  Significance =  0.00
Residue Identity  =    46%  Matches          =    513  Mismatches   =   453
Gaps              =    135  Conservative Substitutions               =     0

          10        20        30        40        50        60        70
    GTTGGCTGAAGGAGTCTTGTATGTTTTTCTGTCGTGGAAGGAATCCCTGGAGTTGGCCCTGCTGGGCCCCTC

          80        90       100       110       120       130       140
    CACACCGGTCAGCTTATATAGCTGGGGCCGGGTGAGATAATCTTCCAACCTGGGAACCGAAGTAACACTCCC

         150       160       170       180       190       200       210
    GCCCCCATTAGGAGCCAACTCAGAGGCAGGTGAATTTTCATTCCAGACTCAGTGTCTGGGAAGCTGAAGAGG

         220       230       240       250       260       270       280
    GAGGGGAGGACAAGCTAACCCTGCTGAATATGTGAATCAGGAAGAAATGTGAGAGGGCCATTCCTTTGGTGG

        290       300       310       320       330       340       350       360
    TGATCACATCGCTCAGCAATGCAAGTCATCCTATTTGTCAAGAGTCAGGGGACAGCTGTCTGTTGACATTGC
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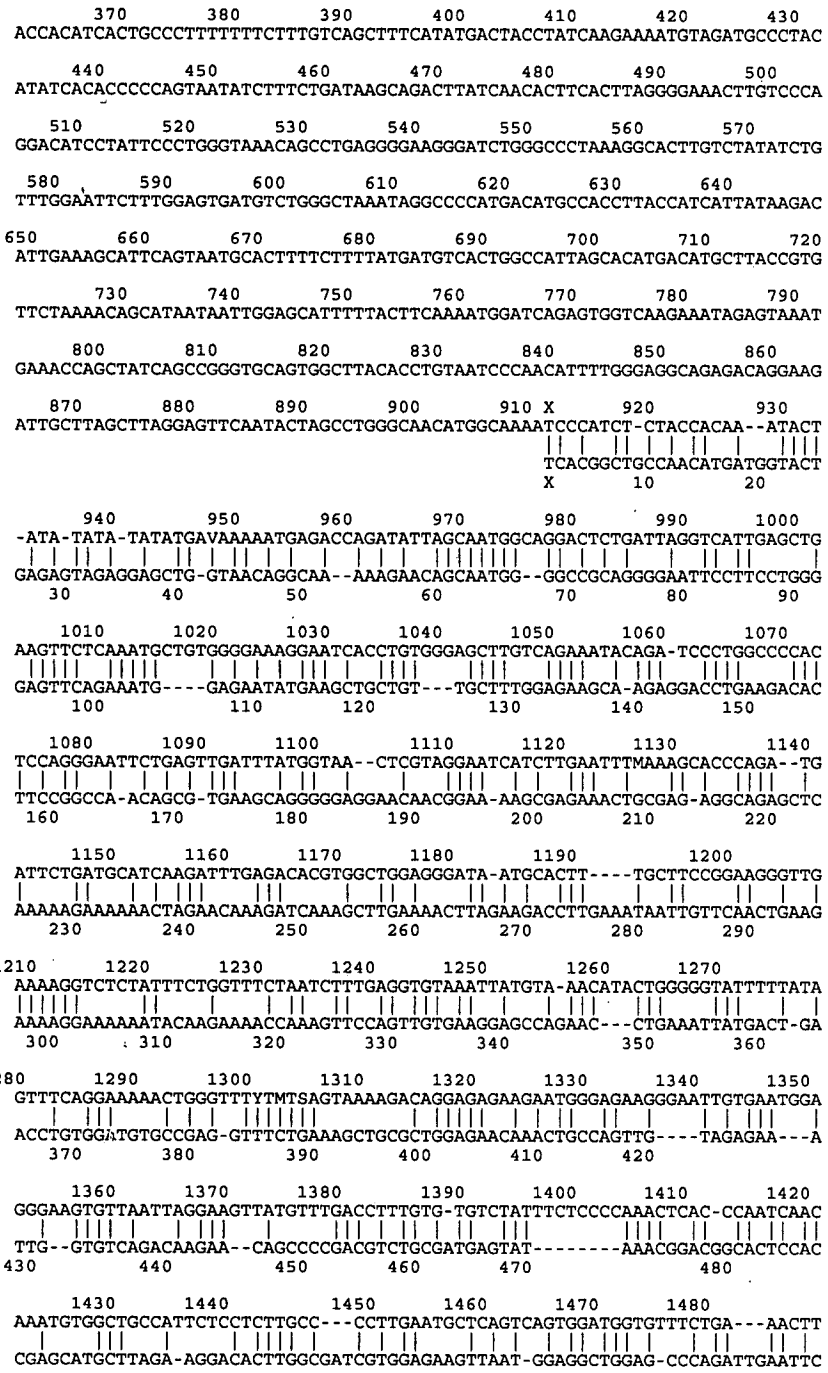

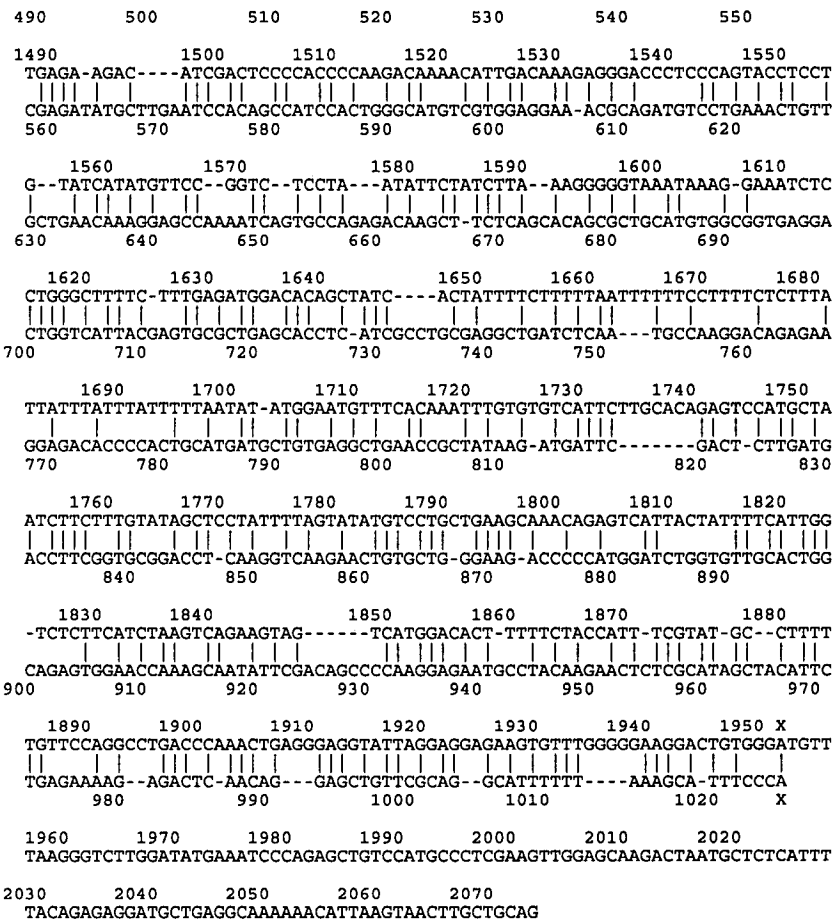

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;  TOIG of: af041847  check: 4536  from: 1  to: 1026
;
; LOCUS       AF041847               1026 bp    mRNA    linear   ROD 21-FEB-1998
; DEFINITION  Mus musculus cardiac ankyrin repeat protein MCARP mRNA, complete
;             cds.
; ACCESSION   AF041847
; VERSION     AF041847.1  GI:2905615
; KEYWORDS    .
; SOURCE      Mus musculus (house mouse)
;   ORGANISM  Mus musculus
;             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
;             Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
; REFERENCE   1  (bases 1 to 1026)
;   AUTHORS   Zou,Y., Evans,S., Chen,J., Kuo,H.C., Harvey,R.P. and Chien,K.R.
;   TITLE     CARP, a cardiac ankyrin repeat protein, is downstream in the Nkx2-5
;             homeobox gene pathway
;   JOURNAL   Development 124 (4), 793-804 (1997)
;   MEDLINE   97195688
;    PUBMED   9043061
; REFERENCE   2  (bases 1 to 1026)
;   AUTHORS   Chen,J. and Chien,K.R.
;   TITLE     Direct Submission
;   JOURNAL   Submitted (07-JAN-1998) Medicine, UCSD, 9500 Gilman Dr, La Jolla,
;             CA 92093, USA
; FEATURES             Location/Qualifiers
;      source          1. .1026
;                      /organism="Mus musculus"
;                      /mol_type="mRNA"
;                      /db_xref="taxon:10090"
;                      /tissue_type="heart"
;      CDS             15. .974
;                      /codon_start=1
;                      /product="cardiac ankyrin repeat protein MCARP"
;                      /protein_id="AAC03533.1"
;                      /db_xref="GI:2905616"
;                      /translation="MMVLRVEELVTGKKNSNGAAGEFLPGEFRNGEYEAAVALEKQED
;                      LKTLPANSVKQGEEQRKSEKLREAELKKKKLEQRSKLENLEDLEIIVQLKKRKKYKKT
;                      KVPVVKEPEPEIMTEPVDVPRFLKAALENKLPVVEKLVSDKNSPDVCDEYKRTALHRA
;                      CLEGHLAIVEKLMEAGAQIEFRDMLESTAIHWACRGGNADVLKLLLNKGAKISARDKL
;                      LSTALHVAVRTGHYECAEHLIACEADLNAKDREGDTPLHDAVRLNRYKMIRLLMTFGA
;                      DLKVKNCAGKTPMDLVLHWQSGTKAIFDSPKENAYKNSRIATF"
; ORIGIN
;
; AF041847  Length: 1026  January 25, 2005 14:32  Type: N  Check: 4536  ..
af041847
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CGCAGGGGAATTCCTTCCTGGGGAGTTCAGAAATGGAGAATATGAAGCTGCTGTTGCTTTGGAGAAGCAA
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GAAATTATGACTGAACCTGTGGATGTGCCGAGGTTTCTGAAAGCTGCGCTGGAGAACAAACTGCCAGTTG
TAGAGAAATTGGTGTCAGACAAGAACAGCCCCGACGTCTGCGATGAGTATAAACGGACGGCACTCCACCG
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GATATGCTTGAATCCACAGCCATCCACTGGGCATGTCGTGGAGGAAACGCAGATGTCCTGAAACTGTTGC
TGAACAAAGGAGCCAAAATCAGTGCCAGAGACAAGCTTCTCAGCACAGCGCTGCATGTGGCGGTGAGGAC
TGGTCATTACGAGTGCGCTGAGCACCTCATCGCCTGCGAGGCTGATCTCAATGCCAAGGACAGAGAAGGA
GACACCCCACTGCATGATGCTGTGAGGCTGAACCGCTATAAGATGATTCGACTCTTGATGACCTTCGGTG
CGGACCTCAAGGTCAAGAACTGTGCTGGGAAGACCCCCATGGATCTGGTGTTGCACTGGCAGAGTGGAAC
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